

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-11 (Cancelled)

12. (Currently Amended) A carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material, **said boron nitride being dispersed in said carbon.**

13. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon is obtained by firing organic substances.

14. (Previously Presented) A carbon heating element according to claim 12, further comprising carbon powder acting as a good conductor.

15. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon heating element has a rectangular cross section.

16. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon heating element is enclosed in a vessel filled with an inert gas.

17. (Currently Amended) ~~A carbon heating element according to claim 12,~~ **A carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material,** wherein the carbon heating element has a specific resistance of about  $4.5$  to about  $7.5 \times 10^{-3} \Omega\cdot\text{cm}$ .

18. (Currently Amended) A carbon heating element according to claim ~~[[12]]~~ **17**, wherein the carbon heating element has a specific resistance of about  $4.5 \times 10^{-3} \Omega\cdot\text{cm}$ .

19. (Currently Amended) A carbon heating element according to claim ~~[[12]]~~ 17, wherein the carbon heating element has a specific resistance of about  $7.5 \times 10^{-3} \Omega \cdot \text{cm}$ .
20. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon heating element has a specific resistance of about  $0.3 \times 10^{-3} \Omega \cdot \text{cm}$ .
21. (Previously Presented) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about 4.5 to about  $7.5 \times 10^{-3} \Omega \cdot \text{cm}$ .
22. (Previously Presented) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about  $4.5 \times 10^{-3} \Omega \cdot \text{cm}$ .
23. (Previously Presented) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about  $7.5 \times 10^{-3} \Omega \cdot \text{cm}$ .
24. (Currently Amended) A carbon heating element comprising carbon acting as a good conductor and a metal or a metalliod compound acting as a conductivity-inhibiting material, wherein the carbon heating element has a rectangular cross section, said metal or a metalliod compound being dispersed in said carbon.
25. (Previously Presented) A carbon heating element according to claim 24, wherein the carbon heating element is enclosed in a vessel filled with an inert gas.
26. (Currently Amended) A method of making a carbon heating element, comprising:  
forming a carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material, wherein said carbon is obtained by firing organic substances, said boron nitride being dispersed in said carbon.

27. (Previously Presented) A method of making a carbon heating element according to claim 26, wherein the organic substances yield carbonization of at least 5% after firing.

28. (Previously Presented) A method of making a carbon heating element according to claim 26, wherein the organic substances comprise polyvinyl chloride and furan resin.

29. (New) A carbon heating element according to claim 12, said boron nitride being uniformly dispersed in said carbon.

30. (New) A carbon heating element according to claim 17, said boron nitride being dispersed in said carbon.

31. (New) A carbon heating element according to claim 24, said metal or metalliod compound being uniformly dispersed in said carbon.

32. (New) The method of claim 26, said boron nitride being uniformly dispersed in said carbon.